HZ/RC/EN LAD981057706



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6 1445 ROSS AVENUE, SUITE 1200 DALLAS, TX 75202-2733

4 June 2009



MEMORANDUM

FROM:

CHUCK BARNES, 6EN-Helfarles / Barrer
Enforcement Officer

TO:

SUNITA SINGHVI, 6EN-HC

Section Chief

Subject:

Trip Report for Marine Shale

- 1. I conducted a corrective action site inspection at the Marine Shale Facility near Amelia, LA, beginning Thursday, April 30, 2009. I was accompanied by Vicky Hadwin from Louisiana Department of Environmental Quality (LDEQ). The purpose of the inspection was to support the LDEO in the project management of a Department of Justice (DOJ) Consent Decree.
- 2. I have attached the photographic record of current conditions at the site. Wastes are still present in what appears to be roll-off dumpsters, containers, and old barges.
- 3. Marine Shale was an incinerator facility for hazardous wastes. It ceased operation and has been idle and abandoned since 1996. A DOJ action resulted in recovering approximately \$7million. Two million has been expended on the initial waste removal. The State of Louisiana is managing the remaining \$5 million to assure final site remediation. Approximately 500 principle responsible parties (PRPs) have been identified with roughly 100 PRP letters sent. An estimate of \$40 million to complete the final clean-up has been made.
- 4. According to Ms. Hadwin, several large bulk storage tanks containing liquid hazardous wastes were removed for proper disposal. However, much of the solid materials and ash are still present on the site.
- 5. No samples were collected during the site visit. However, according to Ms. Hadwin, samples have been collected and a Corrective Measure Study (CMS) has been commissioned based on those sample results. A unique aspect of the CMS and the existing legal action is there is not a requirement to implement the corrective measures identified in the CMS.
- 6. The extent of contamination at the site is unknown at this point.

- 7. Areas that need additional emphasis and investigation include:
 - a. Ash remaining on site metals
 - b. Hydraulic fluid remaining on site metals, organics, etc.
 - c. Barge slip metals, PCBs, organics
 - d. Refractory bricks metals, radiation
 - e. Creosote pad organics, metals, volatiles, semi-volatiles, etc.
 - f. Ash remaining in bag houses and cyclones
 - g. Materials remaining as usable product in the warehouse
- 8. Conclusions and Recommendations:
 - a. This will be a long term project, probably encompassing over 5 years.
 - b. Additional work will be required.
 - c. Review the CMS once received by LDEQ
 - d. Evaluate corrective action recommendation for adequacy and protection of human health and the environment
 - e. If CMS recommendations are found to be inadequate;
 - i. Contact remaining PRPs for additional funding
 - ii. Conduct additional sampling to define extent of contamination
 - iii. Identify and take interim measures to remove remaining wastes on site
- 9. Final analysis; more needs to be done at the site but at this point more information is needed before a course of action can be recommended.

Attachment:

Photographic record

cc: Vicki Hadwin, LDEQ

Official Photograph Log

The following photographs present a graphic image of many different issues to be found at this site.

There are multiple areas that need attention and are potentially very dangerous because of the unknown nature of the site conditions.



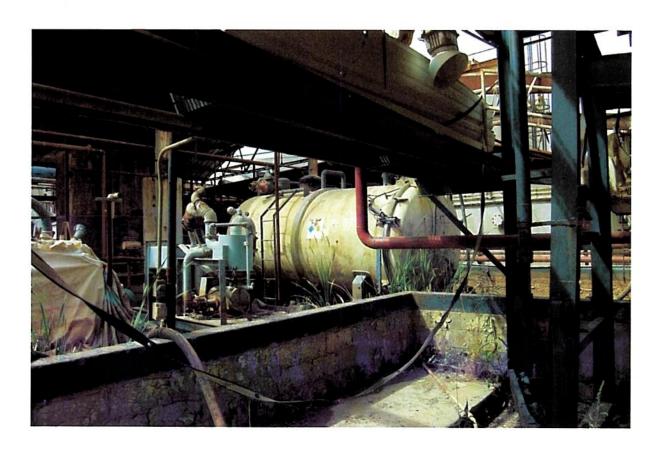
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Ash hopper at base of incinerator bag house		

Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		

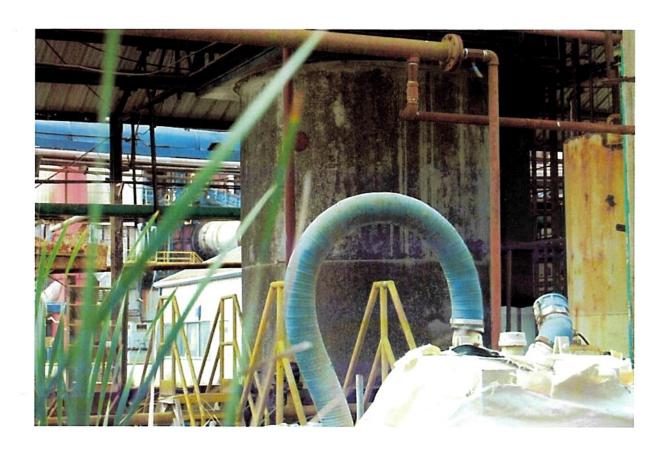
Subject: Multiple portions of the facility. Support structures for rotary kiln



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Tankage and pumps with secondary containment		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Standing water inside secondary containment		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Tankage related to rotary kiln		



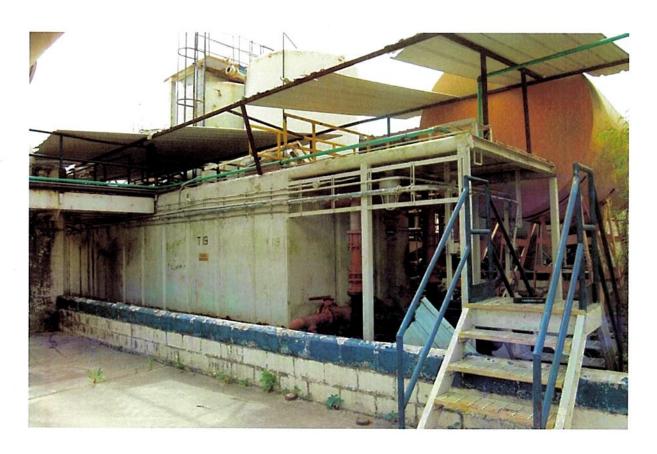
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of cattails growing inside contain		le secondary containment area. Note



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Broader view of preceding photograph		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia, State		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Storm drain adjacent to barge slip		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Bulk tanks associated with incinerators operations		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Rotary kiln and associated bulk storage processing facilities		

Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marina Shala Facility		

Location: Marine Shale Facility

Subject: Multiple portions of the facility. Bulk material processing facilities. Note standing water at

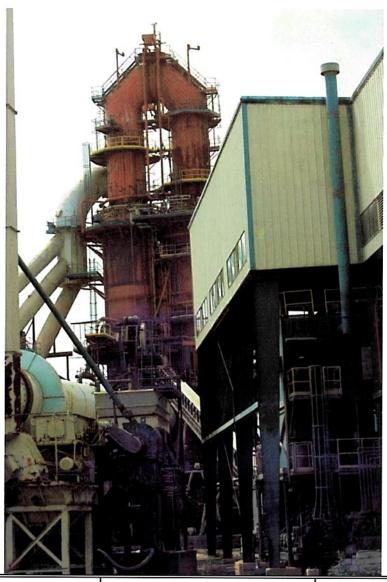
lower left of photograph



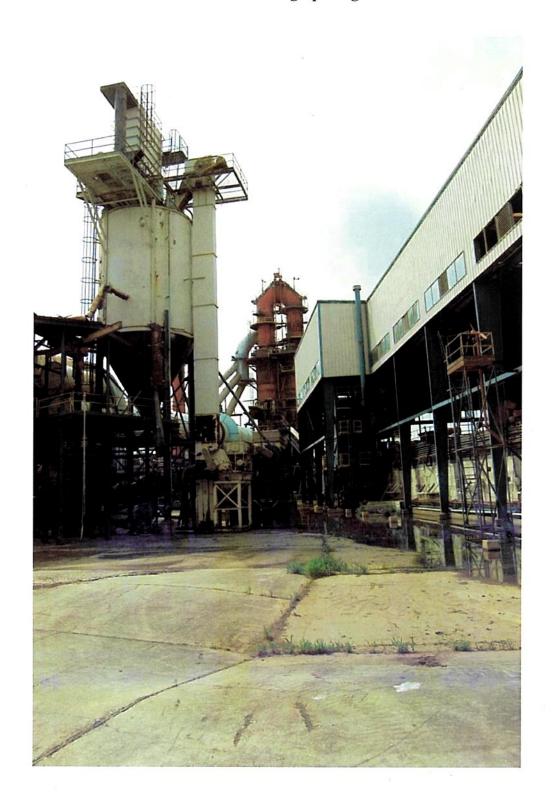
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Broad view of rotary kiln, bulk material processing area and standing waters.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facil	ity	
Subject: Multiple portions of the facility. Bulk/dry material handling equipment. Note corrosion		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Incinerator Afterburner		



Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,	*	State: LA

Location: Marine Shale Facility

Subject: Multiple portions of the facility. Electrical conduit. Copper wire has reportedly been stolen

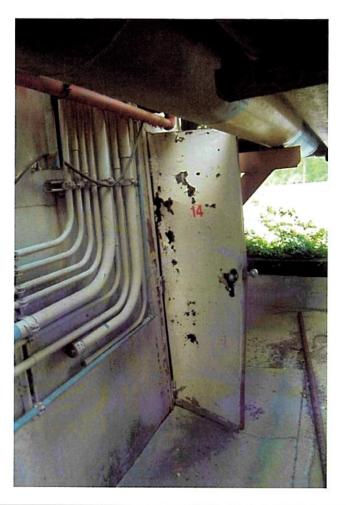
from the facility



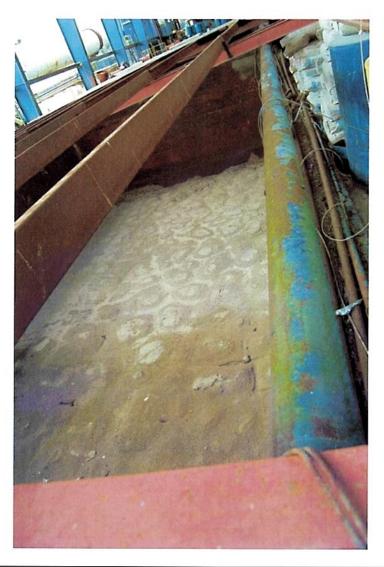
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facil	ity	
Subject: Multiple portions of	the facility. Support pilings a	nd barge tie up along canal



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Storm damage to doors & facility equipment		

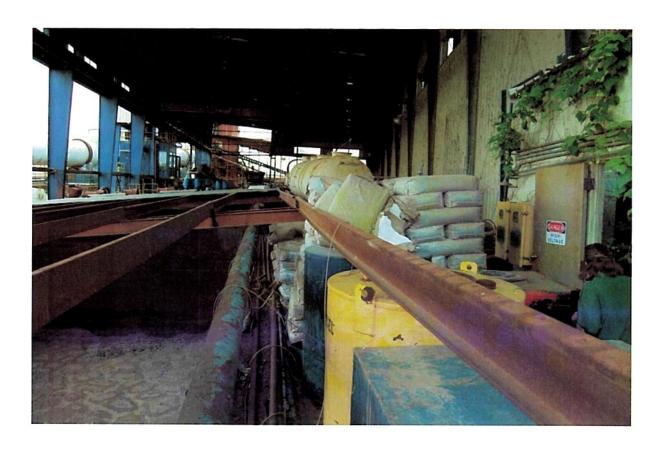


Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Storm damage to doors & facility equipment		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Bulk material remaining at the site		

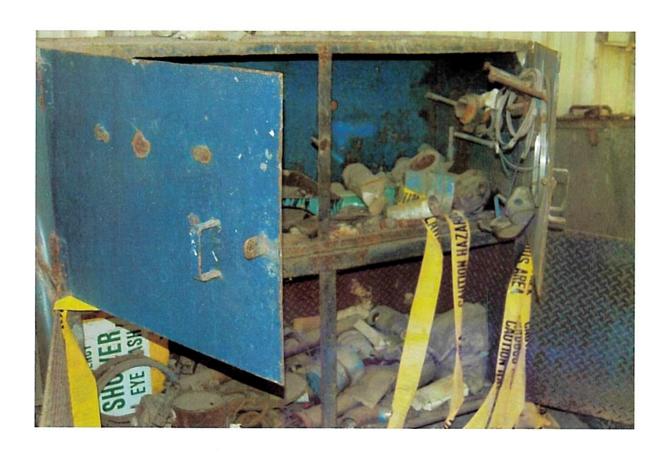
Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		

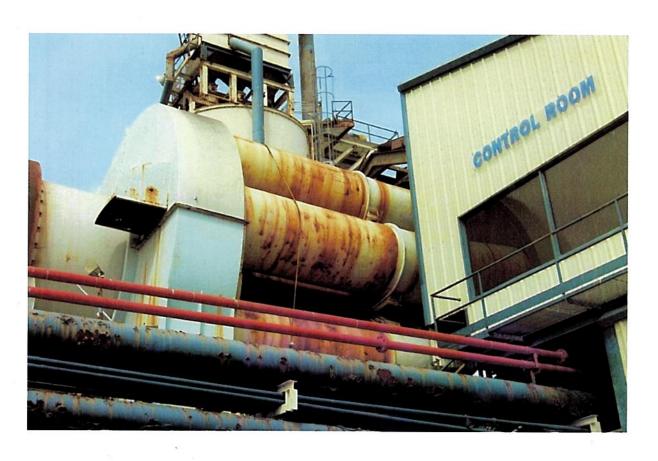
Subject: Multiple portions of the facility. Bulk Receiving & Treatment Area

Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		

Subject: Multiple portions of the facility. Operational equipment storage area



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Rotary Kiln & Control Room		



Photographer: C Barnes Date: 4-30-09		Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Operational Storage Area		

Official Photograph Log



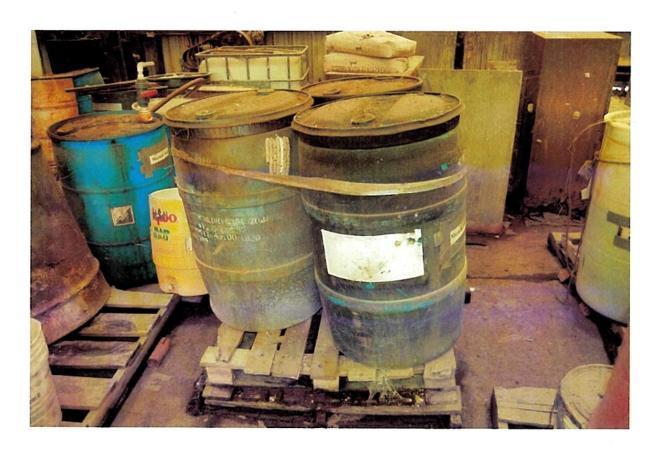
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		•

Location: Marine Shale Facility

Subject: Multiple portions of the facility. Operational Storage Area

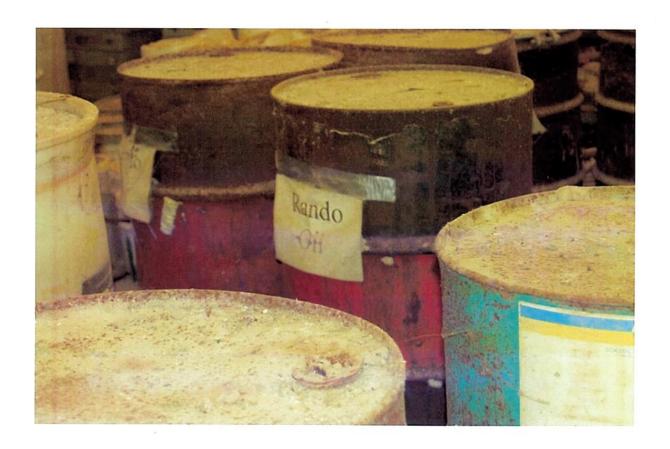


Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility	y	
Subject: Multiple portions of the	ne facility. Wastes stored in Opera	tional Storage Area



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Wastes stored in Operational Storage Area		

Official Photograph Log



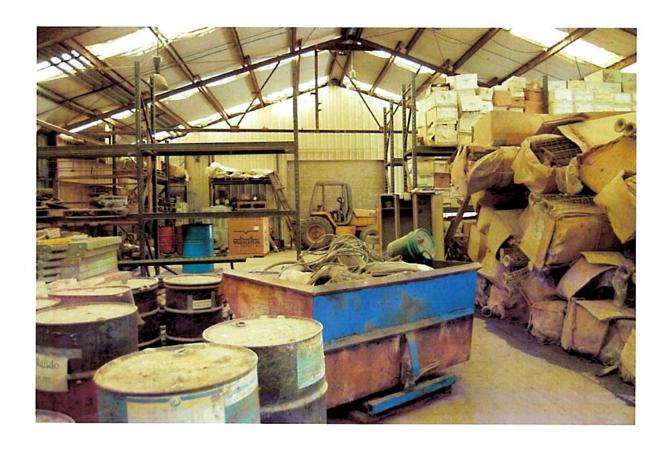
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA

Location: Marine Shale Facility

Subject: Multiple portions of the facility. Unknown/Unexplained labeling on Drums in Operational

Storage Area

Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA

Location: Marine Shale Facility

Subject: Multiple portions of the facility. More debris & unknown materials in Operational Storage

Area.



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the	e facility.	



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility	y	
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Faci	ity	¥
Subject: Multiple portions of condition. Contents undeterm		iner storage rack – materials in very poor

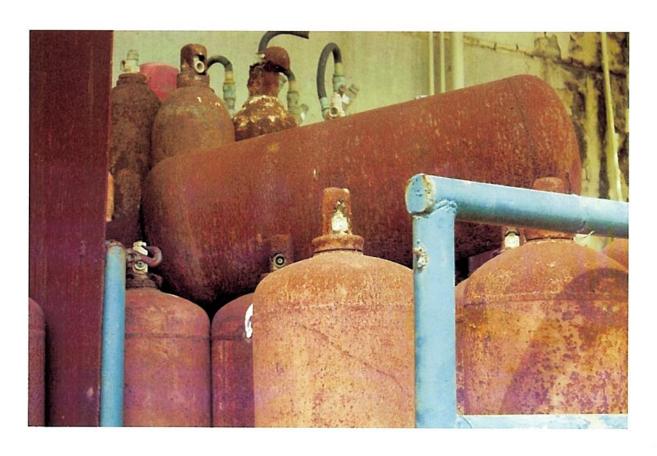
Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA

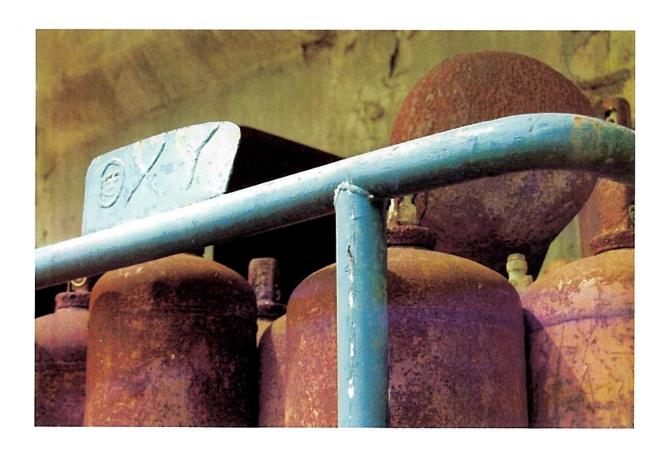
Location: Marine Shale Facility

Subject: Multiple portions of the facility. Pressurized container storage rack – materials in very poor condition. Contents undetermined.



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of condition. Contents undetermi		iner storage rack – materials in very poor

Official Photograph Log



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA

Location: Marine Shale Facility

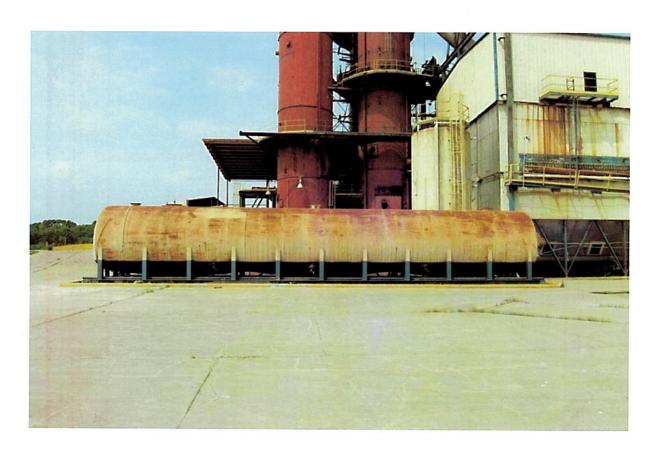
Subject: Multiple portions of the facility. Pressurized container storage rack – materials in very poor condition. Contents undetermined.



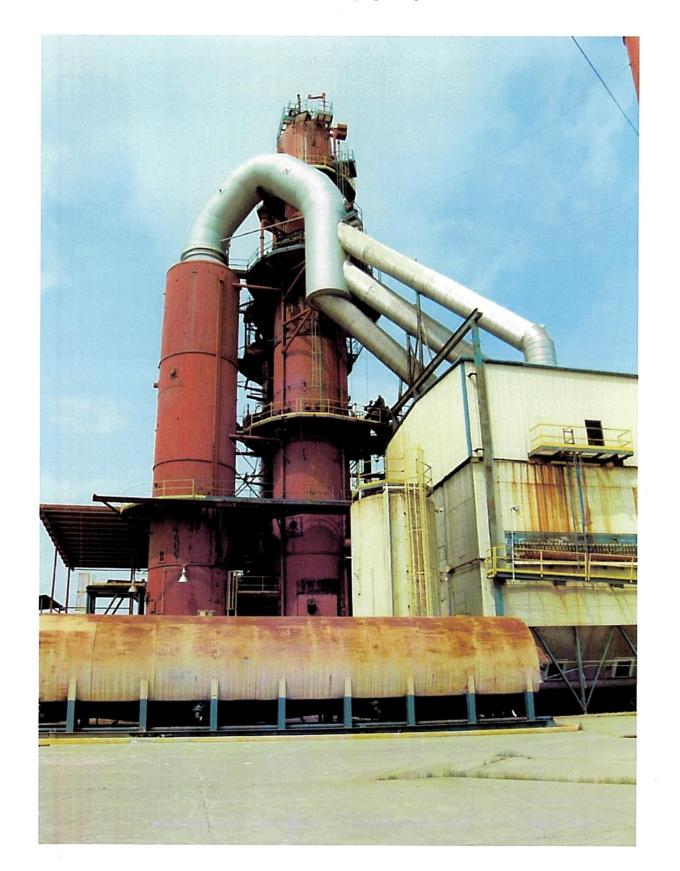
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		

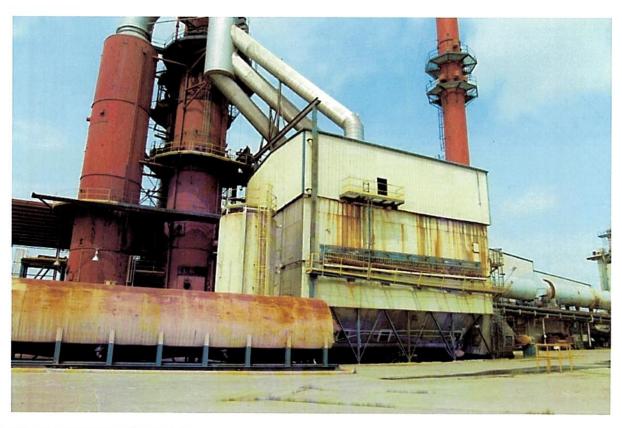


Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		





Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facil	ity	•
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



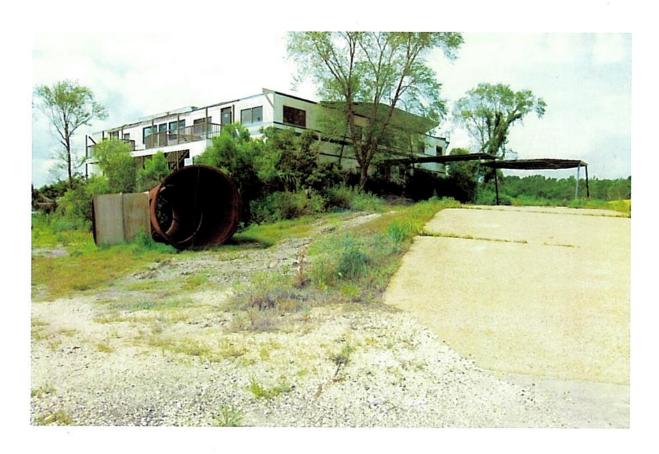
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Truck unloading terminal. Truck trailer is still inside the facility		



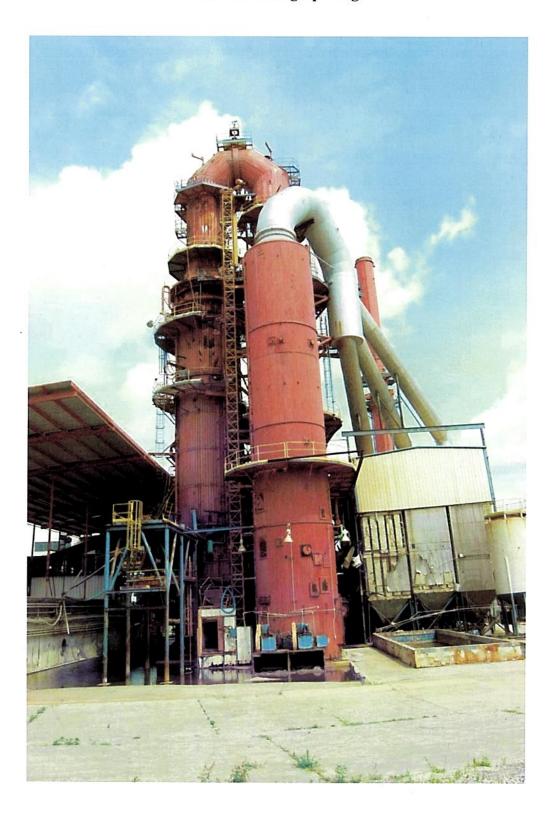
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Truck unloading terminal. Truck trailer is still inside the facility		



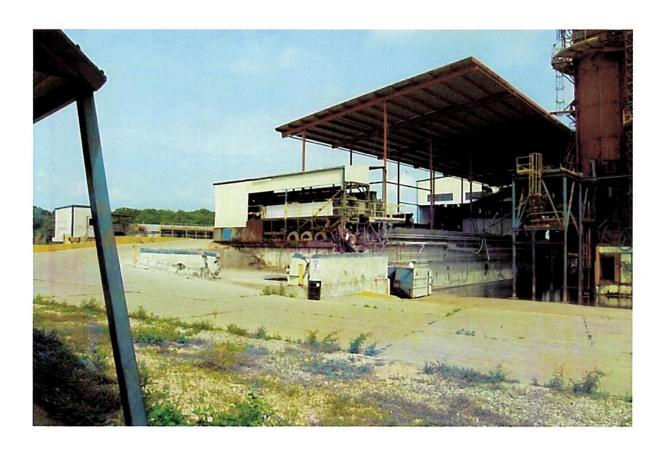
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		ė
Subject: Multiple portions of the facility. Headquarters building		



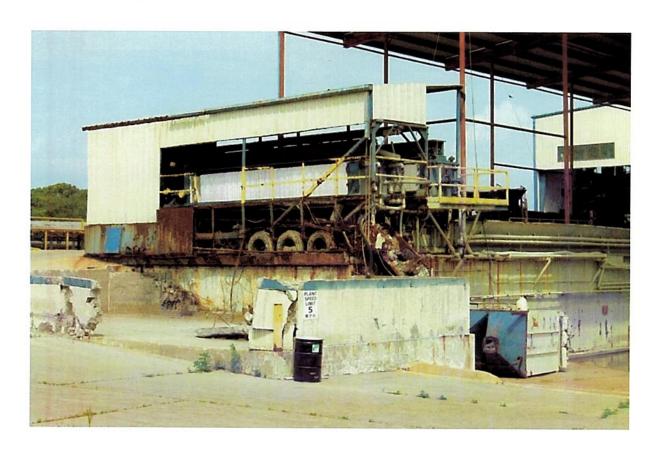
Official Photograph Log



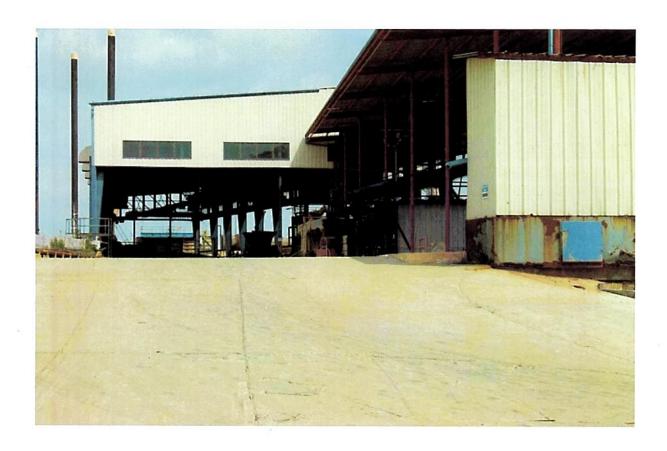
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		

Subject: Multiple portions of the facility. Truck unloading terminal. Truck trailer is still inside the

facility



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Truck unloading terminal. Truck trailer is still inside the facility		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Bulk unloading area		



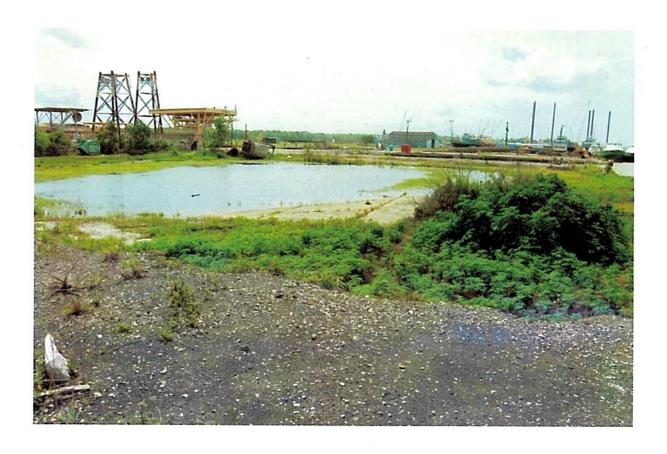
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Ash & clinker from the incinerator.		



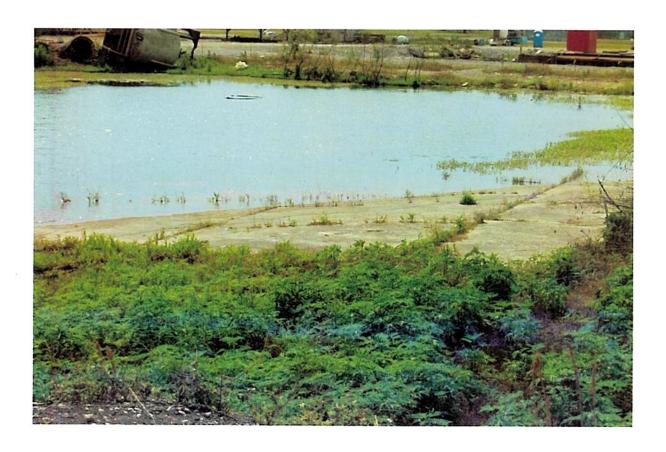
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Ash & clinker from the incinerator		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Ash & Slag/clinker from the incinerator		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facili	ty	
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Creosote storage area - underwater		



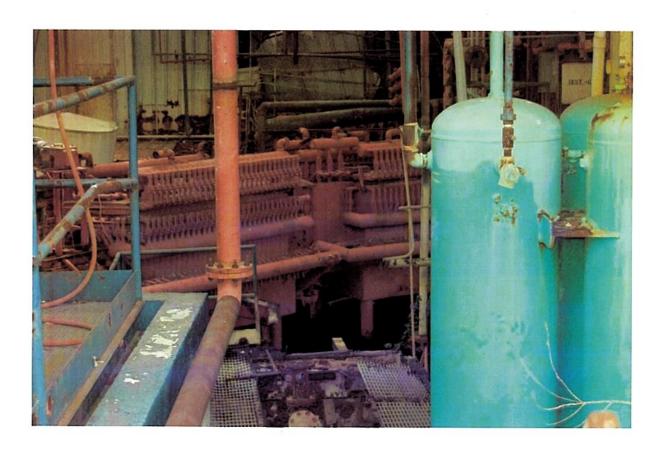
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Hazardous Waste container in bulk unloading area.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Sludge & liquids in bulk unloading area		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



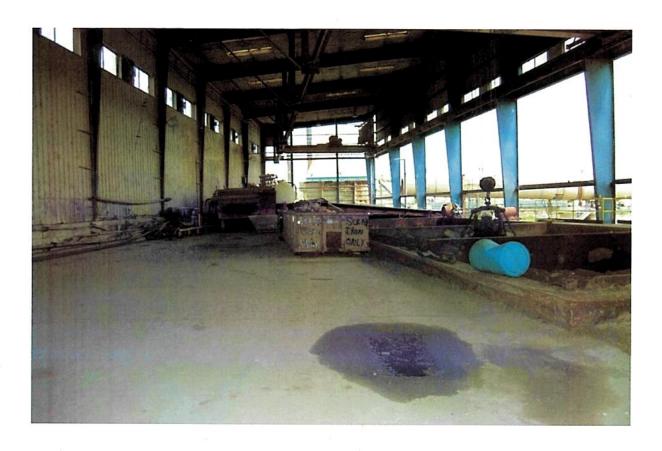
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



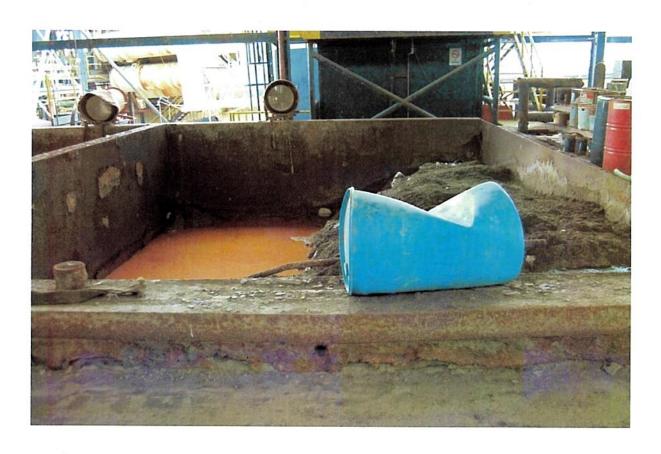
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300	
City/County: Amelia,		State: LA	
Location: Marine Shale Facility			
Subject: Multiple portions of the facility. Dumpster filled with fire brick – possible radiation issues			



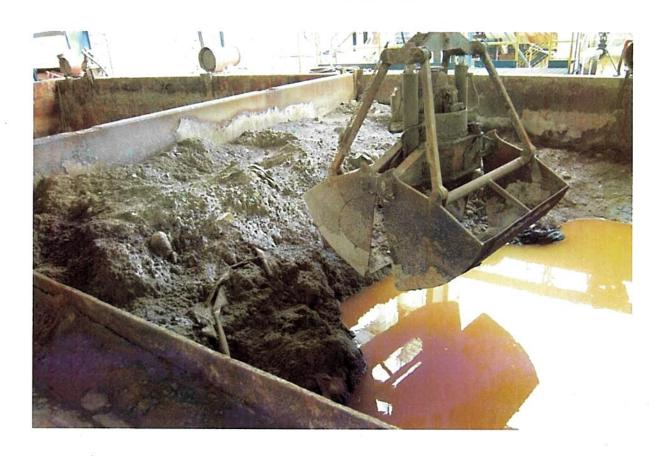
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300	
City/County: Amelia,		State: LA	
Location: Marine Shale Facility			
Subject: Multiple portions of the facility.			



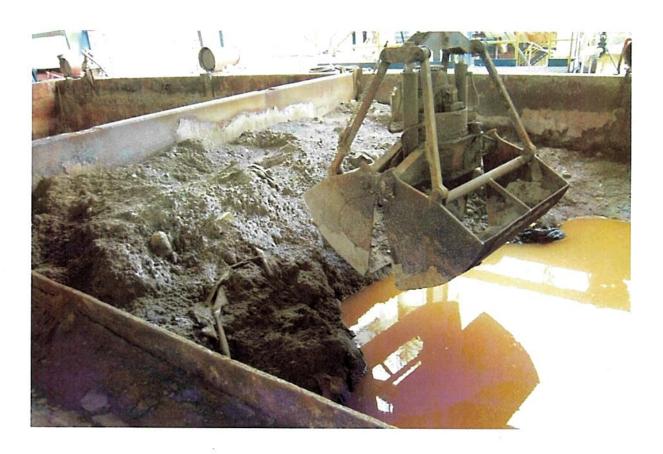
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Fire Brick potential radiation issues		



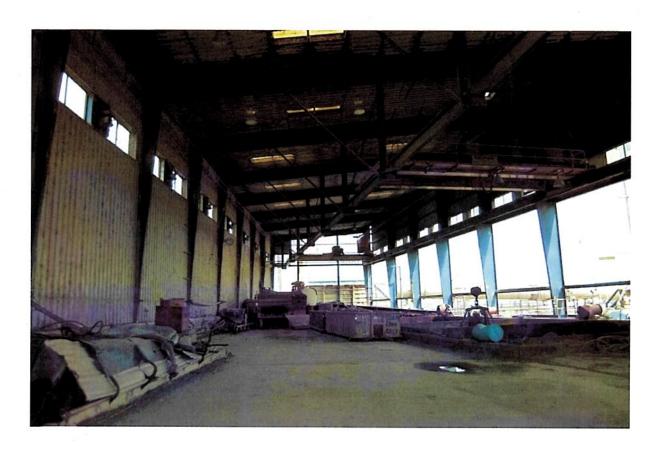
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



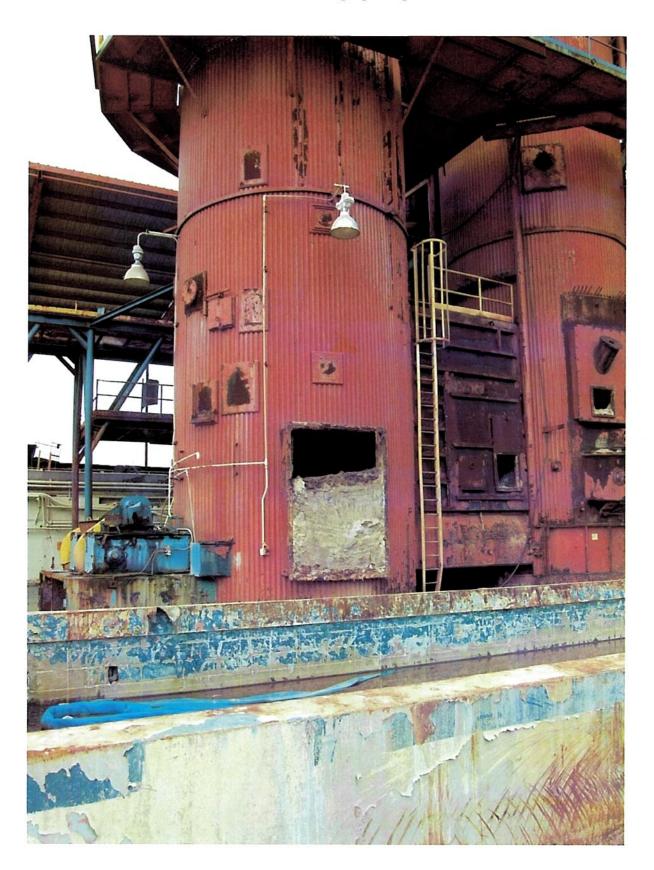
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		

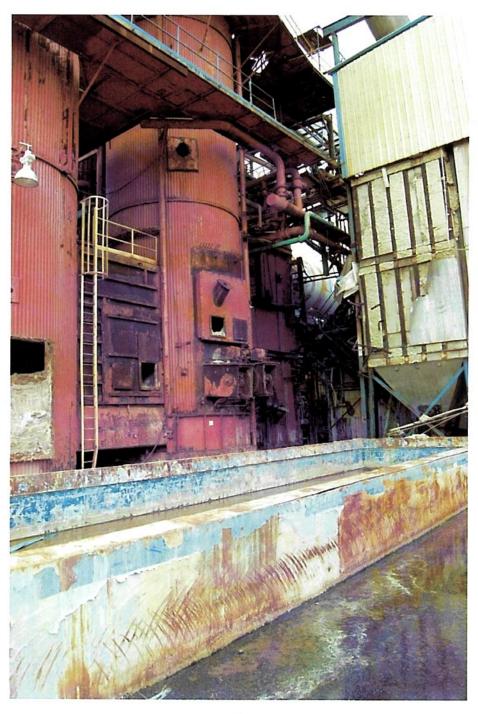


Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



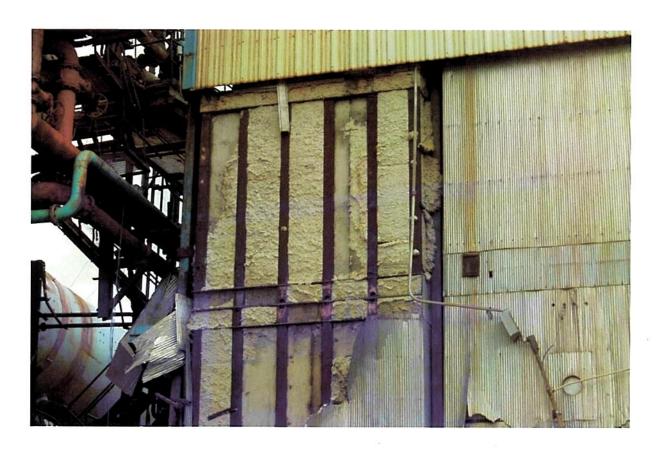


Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		





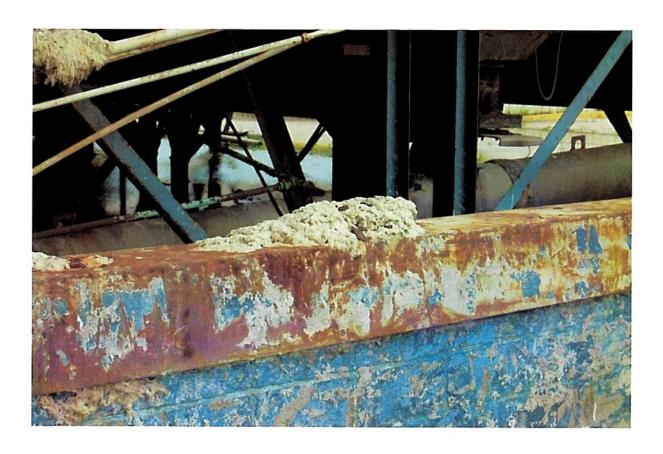
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Dust collectors		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility.		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300	
City/County: Amelia,	State: LA		
Location: Marine Shale Facility			
Subject: Multiple portions of the facility. Standing water under dust collectors			



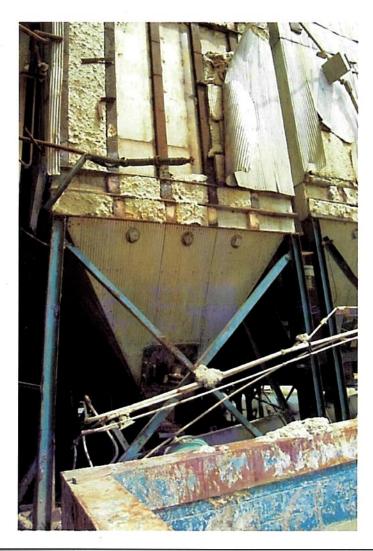
Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300
City/County: Amelia,		State: LA
Location: Marine Shale Facility		
Subject: Multiple portions of the facility. Insulation coming out of dust collectors		



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300		
City/County: Amelia,		State: LA		
Location: Marine Shale Facility				
Subject: Multiple portions of the facility.				



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300		
City/County: Amelia,		State: LA		
Location: Marine Shale Facility				
Subject: Multiple portions of the facility.				



Photographer: C Barnes	Date: 4-30-09	Time: 0900 to 1300		
City/County: Amelia,		State: LA		
Location: Marine Shale Facility				
Subject: Multiple portions of the facility.				